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MAUREEN O. HELMER
General Counsel

JOHN C. CRARY
Secretary

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March 15, 1996

Mr. William F. Caton
Secretary
Federal Communications Commission
1919 M Street NW
Washington, DC 20554

RE: N.Y. PSC Exparte Comments - An original and one
copy filed in the proceeding.
In the Matter of Telephone Number Portability:
CC Docket No. 95-116 RM 8535

Dear Secretary Caton:

On July 13, 1995, the Commission adopted a Notice of Proposed Rulemaking on telephone number portability. The New York State DPS filed comments suggesting that the states and the various industry groups should work together to arrive at long-term number portability solution(s). This is precisely the approach we have followed in New York. On January 23, 1996, the New York Public Service Commission issued the attached order. Therefore, pursuant to the Commission's ex-parte rules 47C.F.R.1.1206(a)(1), we wish to submit two copies of the New York Public Service Commission's January 23, 1996 memorandum order that will provide you an updated status of this issue in New York. As the enclosed order notes, the New York PSC has endorsed Local Routing Number (LRN), as a permanent number portability solution in New York.

Very truly yours,

Maureen O. Helmer
MAUREEN O. HELMER
General Counsel

Enclosures

cc: Susan McMaster, FCC
w/Enclosure

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Approved as Recommended
and so Ordered
By the Commission

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MAR 18 1996

JOHN C. CRARY
Secretary

ISSUED &
EFFECTIVE JAN 23 1996

STATE OF NEW YORK
DEPARTMENT OF PUBLIC SERVICE

January 4, 1996

TO: THE COMMISSION

FROM: COMMUNICATIONS DIVISION

SUBJECT: CASE 94-C-0095 - Proceeding on Motion of the Commission to Examine Issues Related to the Continuing Provision of Universal Service and to Develop a Framework for the Transition to Competition in the Local Exchange Market.

Number Portability Trial - Progress Report

Petition of Rochester Telephone Corp. to
discontinue the Rochester number portability trial

RECOMMENDATION: It is recommended that the Commission:

- 1) endorse the trial Steering Committee's selection of Location Routing Number as a permanent number portability solution in New York;
- 2) direct Staff, in consultation with the trial Steering Committee, and other interested parties, to begin to develop a framework for deployment of long-term number portability in New York; and,
- 3) grant the petition of Rochester Telephone Corp. to relieve it of its obligation to conduct a number portability trial in its service territory.

SUMMARY

The Commission, by its September 25, 1995 order, authorized trials of service provider number portability in Manhattan and Rochester.¹ The Commission also directed Staff to submit a progress report by January 1, 1996 and to include in

¹ Case 95-C-0095 - Order Authorizing Trials of Service Provider Number Portability in Manhattan and Rochester, issued September 25, 1995.

that report a discussion of long-term number portability approaches.

In response to the Commission's directive, Staff, in conjunction with the trial partners, has prepared a consensus report, attached to this memorandum, which responds to the issues raised by the Commission in its September order. The consensus of the trial Steering Committee is that the Manhattan trial should go forward, as planned; however, for the reasons discussed herein, the committee concludes that no useful purpose would be served by proceeding with the Rochester trial, and that it should, therefore, be cancelled. Accordingly, Rochester Telephone Corp., by petition filed December 15, 1995, has requested that the Commission's September 25, 1995 order be modified to relieve the company of its obligation to participate in the Rochester trial; this petition should be granted.

In addition, there is currently a general consensus in the telecommunications industry that a viable long-term number portability solution called Location Routing Number (LRN) is being developed and that LRN is emerging as the preferred long-term methodology. Accordingly, the consensus report recommends that the Commission endorse LRN as the permanent number portability solution in New York, and that the Steering Committee, and other interested parties, begin work immediately on developing a framework to accelerate its deployment in the state.

BACKGROUND

The Commission has previously concluded that number portability is essential to the development of vigorous local telephone service competition, and in March 1995, directed that a study of the feasibility of a trial of true number portability be undertaken.¹ At the August 23, 1995 session, Staff reported the results of its collaborative efforts with various

¹ Case 94-C-0095 - Order Requiring Interim Number Portability Directing a Study of the Feasibility of a Trial of True Number Portability and Directing Further Collaboration, issued March 8, 1995.

telecommunications companies to determine the feasibility of a trial, and to develop a framework to implement a trial of long-term number portability solutions. Staff reported that it believed that trials, in both Manhattan and Rochester, were not only feasible, but should proceed, in three phases. Phase I would use an unassigned central office code with lines divided by line number among the trial participants and test calls would be placed to demonstrate functionality. Phase II would utilize certain central office codes currently in use. Line numbers for administrative offices of the trial participants which reside in the trial central offices would be ported between carriers and the processing of normal traffic would be evaluated. Phase III would test the vendor platform with customers who, at the time of trial, are assigned line numbers out of the trial central offices.

In preparing for the trials in their respective service territories, two of the trial partners, New York Telephone (NYT) and Rochester Telephone Corp. (RTC), expressed concern to Staff that several technical shortcomings could affect the conduct of the trials, including possible adverse effects on non-trial customers during Phases II and III. These concerns were discussed in Staff's August report to the Commission; however, we concluded that NYT's and RTC's comments did not provide sufficient reason to abandon the trials altogether or to delay them. The Commission did, however, direct Staff, to consult with the trial partners, and to report, by January 1, 1996, on the progress that had been made in resolving these technical issues. In addition, the Commission directed that the report also include the steps that would need to be taken to ensure that service to non-trial customers would not be adversely affected during the trial, and a discussion of possible long-term number portability approaches and the relevant context of the proposed trials within that framework.

DISCUSSION

Based on its ongoing collaborative efforts with the trial partners, Staff submits this memorandum and the attached

report (Attachment A), as directed by the Commission. The report is the consensus of the trial Steering Committee and addresses each of the issues outlined by the Commission in its September order. The report recommends that the Manhattan trial go forward, as directed by the Commission. However, only three parties -- Rochester Telephone, Time-Warner, and Cellular One -- had committed to participate in the Rochester trial and, due to technical constraints, the trial was going to be limited to Phase I only.

After analyzing the need to proceed with the trial and the costs to participate, the three Rochester trial participants agree that no additional useful information would be gained in the Rochester trial that could not be gained from the trial in Manhattan. While USIntelco (the vendor for the Rochester trial), Time-Warner, Rochester, and Cellular One are willing to support a Commission decision to proceed with the Rochester trial, and have, in fact, been working toward that end, they also believe that their resources could more effectively be re-directed to development of a strategy for implementing a long-term number portability solution in New York. It is now the consensus view of the Steering Committee that the Rochester trial should be cancelled.

As previously indicated, all of the trial partners now recognize that the telephone industry, as a whole, has generally embraced a new database methodology called Location Routing Number as the most viable long-term number portability solution. This approach has been developed by AT&T only recently and was not ready for submission by AT&T in response to New York's March 1995 RFP and as a result, is not being trialed in New York. LRN is expected to be generally available for installation on most major central office switching equipment in the second quarter of 1997. The Steering Committee members have reached a consensus that LRN is the long-term strategy to adopt in New York and

recommends that the Commission endorse their selection.¹ As an additional means of inviting public comment on this issue, we also published a notice of proposed regulatory action in the November 1, 1995 State Register and, among other things, invited comments from the public on "viable long-term approaches to number portability." Other than the consensus report attached to this memorandum, no other comments have been received by us.

Location Routing Number or LRN is emerging as the most viable long term number portability solution as it is generally recognized that it minimizes impacts on carriers' existing network architecture by preserving existing routing logic and hierarchy, minimizing switch modifications, SS7 impacts, and changes to databases and various operating systems. Equally important, LRN preserves various feature functionalities (e.g., Call Return, Automatic Recall, etc.) for CLASS customers. In our August 23, 1995 memo, we detailed some of the technical problems associated with both the Manhattan and Rochester trial approaches. Workarounds for the trials were expected to all but eliminate these problems, but the long-term view is that major switch development work would have been necessary to eliminate these problems altogether. LRN is expected to resolve all these issues satisfactorily.

There are several other factors which have caused LRN to emerge as the industry consensus for long-term number portability. For example, LRN can be migrated to other forms of number portability such as location and service portability.² It is acknowledged that the Manhattan trial approach is limited to service provider number portability. Second, LRN uses a single customer-specific telephone number for porting customers from one switch to another, thereby conserving number resources.

¹ Other states, including Illinois, California and Maryland, have adopted LRN as the call model for permanent service provider number portability deployment. Many of the Steering Committee members are also working in these other venues.

² Currently, our focus is primarily on service provider number portability.

The Rochester trial approach, on the other hand, would have used two telephone numbers for each number ported, and is generally considered more cumbersome to administer. Steering Committee members in other state efforts have used exhaustive call model comparisons to weigh the pros and cons of each of the approaches. LRN has consistently scored highest in these comparisons. The results have convinced switch manufacturers to commit to have LRN in their respective switches by mid 1997. Many of the Steering Committee members in New York are also part of other selection committees in other states and they have acknowledged that LRN is the most viable long term solution to number portability by their recommendation to move forward on LRN in New York as well.

However, it should be noted that even broad gauge cost estimates of deploying LRN are not yet available as the switch manufacturers are currently developing the software necessary to deploy this approach. AT&T has stated, however, that it believes that LRN will have the lowest long-term cost impact on the network, presumably lower than either of the two trial approaches. Since LRN has received wide endorsement from divergent industry interests (e.g., incumbent LECs, new entrants, interexchange carriers and switch manufacturers), who will ultimately use and pay for LRN, it is reasonable to conclude that the design and costs for network reconfiguration and software upgrades will be the most efficient.

In any event, recent and rapidly changing events in the development and acceptance of a true long-term number portability solution have necessitated a refocusing of trial parameters, since it is generally acknowledged that the solution being trialed in New York is not a long-term solution.¹ Nonetheless, we, and the trial partners believe that the Manhattan trial should go forward with a change in emphasis from the technical

¹ MCI believes that its solution, CPC, could be used as a transitional approach pending the introduction of LRN, while USIntelco believes that some aspects of its LANP solution can ultimately be used in conjunction with LRN. Both vendors acknowledge, however, that their respective approaches, as currently conceived, are primarily interim ones.

aspects of how the solutions will work, to the operational and administrative aspects of intercompany processes involved in changing a customer from one company network to another.¹ In addition, there are other operational issues, such as public safety issues and operator systems impacts, about which the trial can provide valuable additional information. It should be noted, however, that the degree of support for proceeding beyond Phase I of the trial varies by individual company. A decision to move to Phase II and III will be made after careful review of the results of Phase I.

In addition to continuing with the Manhattan trial, the Steering Committee recommends that a parallel effort be undertaken to work through other issues which will accelerate deployment of long-term number portability, such as a process to choose a neutral database administrator and the development of a service management system (SMS) database, exploration of cost recovery, billing and rating and legal issues, and other matters deemed crucial to successful implementation of long-term number portability. Beginning to work through these issues now, with the knowledgeable and committed members of the existing Steering Committee, and any other interested parties, can only serve to accelerate actual deployment of service provider number portability. The six month Manhattan trial is unlikely to end significantly before August 1, 1996. Deployment of LRN is currently scheduled to begin in the first quarter of 1997; therefore, there is little to be gained in waiting for the trial's end to begin to address issues that must be addressed

¹ While it would appear to be desirable to trial LRN in some form, according to AT&T, LRN is not sufficiently far enough along in its current development to have any version of it available for the February 1, 1996 start date of the Manhattan trial. Moreover, AT&T has indicated that it does not intend to trial LRN outside its own laboratories in any case. Some routine inter- and intra-company testing will be required, however.

prior to successful implementation of number portability in New York.¹

We should also add here that although other states continue to move forward in discussions of LRN deployment, we are still in an optimal situation. Other states have not trialed any form of number portability using database technology. The results of the Manhattan trial can give the companies a head start into what operational changes will be needed as a strategy for deployment of LRN is developed under the proposed framework. In addition, it is important to note that neither NYNEX nor RTC are involved in these other state efforts; going forward on our own track assures this.

Finally, as the Commission would recall, the FCC has had a number portability proceeding underway for some months now. Comments and reply comments have been filed by a number of parties and the results of this inquiry are awaited. We believe that there is a need to move ahead in New York as local exchange competition is beginning to emerge more rapidly in New York than in most other states. We fully expect the federal efforts to be influenced by the trials and decisions in New York as well as other states.

RECOMMENDATION

Rapidly changing events in the number portability arena have advanced to the point where a permanent solution can now be identified, and a deployment strategy considered. The Steering Committee members desire to expedite these next steps and Staff believes that this is an appropriate course of action.

Therefore, it is recommended that the Commission endorse Location Routing Number as a viable permanent long-term number portability solution in New York, and direct Staff, in conjunction with trial partners and other interested parties, to pursue a long-term framework for number portability deployment in

¹ Other jurisdictions, such as Illinois and Maryland have already formed committees to address these issues, and Maryland has asked the telecommunications industry in general for assistance.

New York State, including the identification and resolution of all of the operational issues associated with long-term deployment.

It is further recommended that, since no pertinent additional information will be gained by going forward with the Rochester trial, Rochester Telephone Corp.'s petition to discontinue the Rochester trial be granted, and the trial of number portability in Rochester be cancelled.

Respectfully submitted,



Paula M. Adams
Principal Communications Rates
Analyst



Gregory C. Pattenau
Associate System Planner

Reviewed by,



Yog R. Varma
Chief System Planner

Approved by,



Richard Stannard
Director of Communications Division

ATTACHMENT A

NEW YORK STATE NUMBER PORTABILITY TRIAL
STEERING COMMITTEE
CONSENSUS REPORT

The New York Number Portability Trial Steering Committee submits this report to the New York Public Service Commission (NYPSC or the Commission) in compliance with the Commission's Order dated September 25, 1995 in Case 94-C-0095.¹ This report² addresses the viability of the number portability approaches being trialed in New York within the context of the long-term number portability framework currently being developed by the telecommunications industry as a whole. Due to recent changes which have taken place in the industry with regard to long-term approaches, the Steering Committee believes that, in addition to the trial, it also should initiate parallel discussions and encourage all other necessary work effort to identify and resolve other issues related to an expeditious and full deployment of long-term number portability in the state of New York. It is noted, however, that participation in this effort is not necessarily a firm commitment by any party to begin implementation of long term number portability as soon as practicable, although full cooperation toward that goal is requested and will be appreciated.

¹ Case 94-C-0095 - Order Requiring Interim Number Portability Directing a Study of the Feasibility of a Trial of True Number Portability and Directing Further Collaboration issued March 8, 1995.

² While this consensus report is based on the numerous deliberative sessions of the Steering Committee members, various members have also filed their written positions on the status of the trials, other number portability issues and the emergence of a long-term consensus approach. These comments are attached (Attachment I) to this consensus report for completeness and clarity: Time Warner Communications' comments dated November 22, 1995, MFS Communications Company, Inc.'s comments dated November 28, 1995, Rochester Telephone Corp.'s comments dated November 29, 1995, Cellular One's comments dated November 29, 1995, MCI Telecommunications Corporation's comments dated November 29, 1995, AT&T Communications' comments dated November 29, 1995, U.S. Intelco Network's comments dated November 29, 1995, New York Telephone Company's comments dated December 4, 1995, and TCG's comments dated December 5, 1995.

This report also discusses the resolution of the technical issues raised by New York Telephone (NYT) and Rochester Telephone Corp. (RTC), as well as the steps being taken to ensure that service to non-trial customers will not be adversely affected during the trial.

(i) LONG-TERM VIABILITY OF TRIAL APPROACHES

Through the collaborative process, the trial Steering Committee members jointly issued a Request for Proposal of long-term number portability solutions in March, 1995. Based on the bids received, two different vendors were chosen for Manhattan and Rochester -- MCI Metro and US Intelco/Stratus Computer, respectively. At the time the bids were received and analyzed, both proposed solutions were deemed potentially viable, long-term solutions to service provider number portability. Since that time, however, a new database methodology called Location Routing Number (LRN), proposed by AT&T, has emerged, and has gained almost unanimous support throughout the telecommunications industry. LRN is expected to be available for a "first application" basis during the fourth quarter of 1996 in the AT&T 5ESS switches¹, and will be generally available on other AT&T switches (i.e. - 1A ESS, 4 ESS²) by mid-1997. Nortel and Ericsson switches are expected to have a similar, if not identical, availability schedule. Because of the industry consensus which has rapidly built around LRN, many other jurisdictions, such as Illinois, Maryland, and Georgia have selected LRN as the long term solution and are working towards its implementation.

Both New York trial vendors, MCI Metro and US Intelco, generally agree that their respective solutions are interim approaches that could be used until LRN can be fully developed, designed, and installed into the switch vendors' generic programs

¹ 5ESS is a registered trademark of AT&T.

² 1A ESS and 4ESS are registered trademarks of AT&T.

in the mid 1997 timeframe.¹ Nevertheless, as discussed below, the consensus of the Steering Committee members is that only the Manhattan trial, using the MCI Metro approach, should be permitted to go forward, although the degree of support for going forward beyond Phase I of the three phase trial varies by individual company and, that no additional useful purpose would be served by going forward with the Rochester trial as well.

(ii) GENERAL CHANGES IN TRIAL FOCUS

As stated above, the Steering Committee believes that the Manhattan trial should proceed ahead. However, since we will not be trialing what is now becoming a consensus long-term solution to number portability, as originally intended, the focus of the trial should be modified. The Steering Committee believes that the trial can be highly beneficial in highlighting issues related to public safety (i.e., how 911 and E911 services can be expected to be impacted by number portability), as well as impacts on operator systems, billing systems and other operational issues. For example, the testing of 10 digit Global Title Translations in the SCPs² is necessary on ported calls for proper completion of Automatic Recall/Automatic Callback and CLASS services that have edit lists associated with them (such as Selective Call Acceptance/Rejection). This application has not been tested anywhere and has value to eventual LRN deployment.

(iii) SPECIFIC CHANGES TO THE ROCHESTER TRIAL

Only three parties had committed to the Rochester trial -- Rochester Telephone, Time-Warner, and Cellular One. Due to technical constraints, both Time-Warner and Cellular One would have participated only in Phase I of the trial. After careful review and analysis of the business need to proceed with the Rochester trial, the three trial participants are in agreement

¹ MCI Metro believes that the methodology it put forth in the trial, Carrier Portability Code (CPC), can be deployed as a viable interim solution until the full-scale deployment of LRN.

² Service Control Points.

that no additional useful purpose would be served by the Rochester trial. This trial had envisioned the use of an LANP¹ approach which has now become a distant third in the industry preferred local number portability solutions. While the Rochester trial participants are willing to support the Commission decision to proceed with this trial as well, if ordered to do so, they believe that their resources are best used to pursue the long term number portability solutions in New York. RTC and Cellular One can benefit from the Manhattan trial by taking advantage of any training offered and continuing to participate in the development of issues surrounding long term deployment of number portability. As to the third Rochester trial participant, Time Warner is a full participant in the Manhattan trial.

(iv) SPECIFIC CHANGES TO THE MANHATTAN TRIAL

Six parties have committed to the Manhattan trial: NYT, Time-Warner, MFS, TCG, AT&T, and MCI. With the exception of TCG, all parties see value with Phase I of the trial. TCG has concerns with the overall value of the trial but nevertheless will participate in the trial. No specific changes are contemplated for the Manhattan trial, although the trial partners agree it is necessary to review the outcome of Phase I before making a recommendation to move to Phases II and III. At this time, Time-Warner sees little marginal value with advancing beyond Phase I believing that Phase I will provide adequate results. NYT at this juncture would not recommend moving beyond Phase I. MFS and AT&T believe that Phases II and III should still be pursued. MCI supports Phase I but would transition the trial into full CPC deployment until LRN is available.

¹ Local Area Number Portability

(v) NON-TRIAL CUSTOMER IMPACTS

There are three features/services, Automatic Callback/Automatic Recall, ISDN and coin phones, which do not interact with the existing AIN¹ 0.1 database look-up trigger which will be used by NYT in the trial. The industry's major switch vendors have already begun to review the trigger interaction problems, and resolution of these issues, most likely using a unique six-digit trigger for portability, is expected in the fourth quarter 1996 or the first quarter 1997 timeframe, well beyond the projected February 1, 1996 Manhattan trial start date for the six-month trial. One way of avoiding these interaction problems is the use of a 10-digit trigger "work-around" on each number that is ported (rather than a 6 digit trigger on the entire portable NXX). However, it is acknowledged by all trial participants that 10-digit triggers are not practicable in the long-term due to administrative complexities, but it will allow numbers to be ported in a trial environment, without "breaking" features such as Automatic Callback/Automatic Recall, for other customers in the trial NXX. The use of a 10-digit trigger will also not impact coin lines or customers subscribing to ISDN.

There is disagreement among the parties over the use of a 6-digit trigger. Several parties believe that the 6-digit trigger will more properly emulate deployment conditions, and only the incumbent carrier has the call volumes necessary to provide reasonable test conditions. However, NYT has declined to use a 6-digit trigger, which requires use of trial-specific, custom software to avoid breakage of other services, and, in NYT's opinion, is not suitable for use outside of a laboratory environment.² Because the potential adverse impact of using such a trigger on non-trial customers is unknown, NYT has declined to use such custom software.

¹ Advanced Intelligent Network.

² AT&T Communications does not agree that the said software is not suitable outside the laboratory environment.

(vi) NEW TECHNICAL ISSUES

Several new service interaction problems were discovered by switch manufacturers during their investigation of a long-term triggering mechanism. The problems potentially involve certain types of two-way DID¹ PBX trunks, Centrex calls which do not use an escape code (e.g., 9+), service interactions with other AIN 0.1 services, and difficulties associated with IntraLATA presubscription. These problems currently are being explored by the switch manufacturers, and, based on research by individual companies, may not affect the trial.


SUMMARY

The trial of number portability scheduled for February 1, 1996 in Manhattan, should go forward as ordered by the Commission; the Commission should be requested to permit all work effort for the Rochester trial to be discontinued. However, given the industry consensus that the "true" long-term number portability solution, Location Routing Number or LRN, while requiring routine inter- and intra-company testing, does not appear to need any technical trials nor is it being planned to be trialed in New York, the Manhattan trial should seek to gather information on all issues which are related to long-term number portability, such as billing, operator services, and safety impacts. The trial, through use of trial-specific work-arounds (e.g., 10 digit triggers), is designed to reduce the possibility of service impacts on non-trial customers, and the trial partners will only move to Phases II and III after careful review of the previous phase, and equally careful consideration of the consequences of going forward.

In addition to conducting the trial in Manhattan, the Steering Committee, and other interested parties, should move forward with the identification and resolution of other


¹ Direct Inward Dialing.

operational issues, deployment costs, cost recovery, and other technical issues which need to be addressed prior to the deployment of long-term number portability in New York. Finally, the Steering Committee also recommends that the Commission direct the industry to develop an implementation strategy for a long term service provider number portability solution (i.e., LRN) so that such an approach can be deployed in New York on an expeditious basis.


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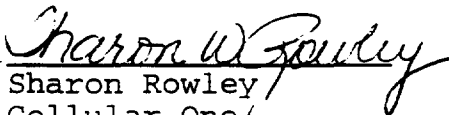
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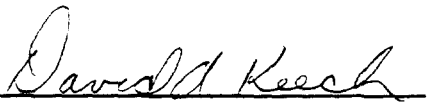
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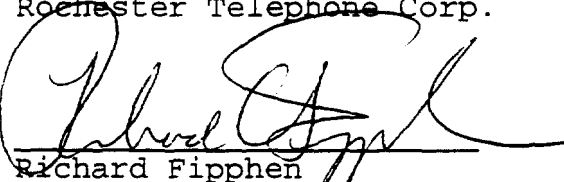
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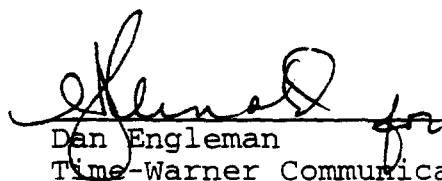
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Dave Keech
Rochester Telephone Corp.

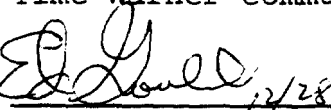
Pamela Kenworthy
MFS Communications

Richard Fipphen
MCI

Penn Pfautz
AT&T Communications

Dan Engleman
Time-Warner Communications

Sharon Rowley
Cellular One/
Genessee Telephone Company

 12/28
Ed Gould
Teleport Communications Group